REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the remarks herewith.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1, 3-6, 8-10, and 12-16 are pending. Claims 2, 7 and 11 have been canceled without prejudice or disclaimer of subject matter. No claims are amended in this paper.

II. REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 1, 3, 5, 6, 8-10, 12, and 14-16 were rejected under 35 U.S.C. §103(a) over European Patent No. 1,069,779 to Kitamura et al. (hereinafter, merely "Kitamura") in view of U.S. Patent No. 6,856,650 to Takishima (hereinafter, merely "Takishima").

Claim 4 was rejected under 35 U.S.C. §103(a) over Kitamura and in view of Takishima and further in view of U.S. Patent No. 6,445,828 to Yim et al. (hereinafter, merely "Yim").

Claim 13 was rejected under 35 U.S.C. §103(a) over Kitamura in view of Takishima and in view of Yim and further in view of U.S. Patent No. 5,991,452 to Shimizu et al. (hereinafter, merely "Shimizu").

III. RESPONSE TO REJECTIONS

Claim 1 recites, *inter alia*:

A signal processing apparatus…comprising:

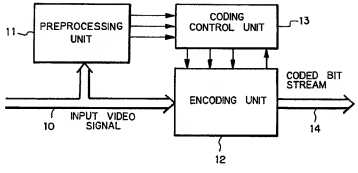
…wherein whether the acquired previously-executed image coding information is used is determined based on at least whether the image data is an I-type and whether a coding phase of a past macro block agrees with that of a coding phase of a current macro block. (Emphasis added)

The Office Action (see page 3, lines 19-24 and page 4, lines 1-8) concedes that Kitamura does not disclose the above-identified features of claim 1 and relies on column 6, lines 11-19 of Takishima to reject "**wherein whether the acquired previously-executed image coding information is used is determined based on at least whether the image data is an I-type and whether a coding phase of a past macro block agrees with that of a coding phase of a current macro block**," as recited in claim 1. Applicants respectfully disagree.

Applicants submit that Takishima **always uses** parameters of a previous coding for a second generation coding of a video signal, as demonstrated below.

Takishima in Figure 1 describes a basic operation of a coding apparatus. A coding control unit, 13, receives parameters from a preprocessing unit, 11, and determines coding parameters. Applicants submit that both the operation of the preprocessing unit 11 and the coding control unit 13 of Takishima need to be examined to determine how Takishima uses coding parameters of a previous coding history.

Fig. 1



In the preprocessing unit 11 of Takishima (see column 4, lines 40-60), if a video signals is previously coded, it extracts parameters of the previous coding history and outputs them to the coding control unit 13 without any modification or alteration. **Applicants submit that such extraction and output by the preprocessing unit 11 are implemented regardless of the frame type or coding phase**. As Takishima explains:

> Takishima, column 4, lines 40-60, When the detector **20** detects that the input video signal is provided with no coded parameter of previous coding (namely, with no previous coded parameter in spite of having a coding history, or with no coding history), the picture type estimator **21** *a* , the quantization step size estimator **22** *a* or the block boundary estimator **23** *a* operates to estimate each coded parameter. **Contrary to this, when the input video signal is provided with a coded parameter of previous coding, the picture type reader 21 *b* , the quantization step size reader 22 *b* or the block boundary reader 23 *b* operates to extract each coded parameter.** The picture type reader **21** *b* , the quantization step size reader **22** *b* and the block boundary reader **23** *b* are constituted so as to only read out the respective coded parameters recorded in headers of each frame. The preprocessing unit **11** may

> be constituted only by the picture type estimator **21** *a* , the quantization step size estimator **22** *a* and the block boundary estimator **23** *a* without having the picture type reader **21** *b* , the quantization step size reader **22** *b* and the block boundary reader **23** *b* . In this case, coded parameters are estimated for all the input video signal.

The coding control unit 13 of Takishima, (see column 5, line 60 –column 6, line 11 and Figure 7) receives the data from the preprocessing unit 11 and decides a picture type, a quantization step size, and a picture block position. Estimation of a coded parameter only takes place if the input video signal is provided with no coded parameter of previous coding. Otherwise, each decision of the picture type, the quantization step size, and the picture block position **always uses the coding parameters of the previous coding history and does not make a decision whether to use these parameters according to a frame type or a coding phase.**

Applicants respectfully disagree with the Office Action on the interpretation of Takishima. Takishima's picture type decision part, as cited by the Office Action (see page 3, lines 19-24), does not disclose or render predictable the above-identified features of claim 1. Takishima (see column 6, lines 10-20 of Takishima) describes the operation of the picture type decision part:

> The picture type decision part **70** decides picture type of each frame used in the current second coding in accordance with the input I/P/B information. If the previous coding picture type is I-picture type, this decision part **70** selects I-picture type. It is the most important to coincide the phase of I-picture frame in the second coding with that in the previous coding. With respect to P-

picture and B-picture, their phases in the second coding may be coincided with these in the previous coding.

Applicants submit that the picture type decision part of Takishima **merely** determines a picture type and coincides the phase to reduce coding noise and deterioration of image data. The picture type decision part does not disclose or render predictable "wherein whether the acquired previously-executed image coding information is used is determined based on at least whether the image data is an I-type and whether a coding phase of a past macro block agrees with that of a coding phase of a current macro block," as recited in claim 1.

Therefore, Applicants submit that claim 1 is patentable.

For reasons similar to, or somewhat similar to, those described above with regard to independent claim 1, amended independent claims 5, 6, 8-10, 12, and 14-16 are also patentable.

As nothing in the prior art cited in the Office Action cures the above identified deficiencies, Applicants respectfully request reconsideration and withdrawal of the rejections.

V. DEPENDENT CLAIMS

The other claims are dependent from one of the independent claims discussed above, and are therefore believed patentable for at least the same reasons. As nothing in the prior art cited in the Office Action cures the above identified deficiencies, Applicants respectfully request reconsideration and withdrawal of the rejections. As each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

Because Applicants maintain that all claims are allowable for at least the reasons presented hereinabove, in the interests of brevity, this response does not comment on each and every comment made by the Examiner in the Office Action. This should not be taken as acquiescence of the substance of those comments, and Applicants reserve the right to address such comments.

In the event the Examiner disagrees with any of statements appearing above with respect to the disclosures in the cited references, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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